

Date: Wed, 15 Sep 93 04:30:36 PDT
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Ham-Space-Errors@UCSD.Edu
Reply-To: Ham-Space@UCSD.Edu
Precedence: Bulk
Subject: Ham-Space Digest V93 #30
To: Ham-Space

Today's Topics:

Can I use MIR as a digipeater? (2 msgs)

Quadrifilar Heliz (4 msgs)

Two-Line Orbital Element Set: Space Shuttle (3 msgs)

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>

Send subscription requests to: <Ham-Space-REQUEST@UCSD.EDU>

Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: 14 Sep 93 14:07:55 GMT
From: ogicse!uwm.edu!ginews!don@network.ucsd.edu
Subject: Can I use MIR as a digipeater?
To: ham-space@ucsd.edu

In article <273bpl\$6tp@TAMUTS.TAMU.EDU> gerry@cs.tamu.edu (Gerald J Creager) writes:
>In article <1993Sep13.184859.23408@microsoft.com>,
>David Arnold <davidar@microsoft.com> wrote:
>>I haven't had any luck trying. Also, any hints on how to connect to MIR
>>would be appreciated. I have attempted on 3 different passes, and in each
>>pass I got "R0MIR-1 Busy".
>
>have to keep the number of simultaneous connects down to a small number.
>Like, 1. So, it's possible to get 'em when they're busy. Basically, it's
>been my experience that you need to get 'em when they just hit the horizon, or
>be persistent throughout the pass. Get a busy disconnect, start the process
>over again immediately. It's not magic, just a little frustrating. But how
>would YOU like to be the subject of so many people's interest?
>

This is absolutely the wrong way to go about this. You are right in that they allow one connect. But if everyone trying to contact MIR persistently tries to connect while MIR is connected to another station, then no one gets connected and the guy who is connected cannot complete his QSO because of the QRM. Everyone then has to wait until MIR times out and resets which is unlikely to happen during that pass. All you've done is guaranteed that no one can complete a QSO by this method.

You should monitor what MIR is doing and only after a QSO with another station is completed should you then try to connect. If you see MIR connect to another station, stop trying immediately until MIR disconnects again.

Donald D. Woelz, K9GR

GENROCO, Inc.

205 Kettle Moraine Drive North
Slinger, WI 53086 U.S.A.

Office Phone: 414-644-8700

K9GR @WB9TYT.#MKE.WI.USA.NOAM

k9gr@k9gr.ampr.org [44.92.1.48]
don@genroco.com

Date: 14 Sep 1993 22:18:35 GMT
From: nothing.ucsd.edu!brian@network.ucsd.edu
Subject: Can I use MIR as a digipeater?
To: ham-space@ucsd.edu

On the other hand, if you get a busy disconnect, that's an established two-way contact - you sent a SABM, they replied with a DM. That's all you need to log it if you're just proving you could do it.

- Brian

Date: 14 Sep 93 15:49:36 GMT
From: ogicse!henson!netnews.nwnet.net!news.uoregon.edu!
systems%ns.uoregon.edu@network.ucsd.edu
Subject: Quadrifilar Heliz
To: ham-space@ucsd.edu

In article <1993Sep13.022441.4648@news.eng.convex.com> psmith@convex.com (Presley Smith) writes:
> Does anyone know where I could find plans/dimensions, etc. for building
> a Qaudrifilar Helix for 145 MHz and 435 MHz? If you know of a book
> or other source of formulas, etc. I'd be more appreciative if you'd
> tell me which one...
>
> Thanks and 73 Presley N5VGC psmith@convex.com

I too would be interested in plans for this antenna...seen ads for them at ~\$300. Could not believe it.

--
Jeff Hite
Computing Center
U of Oregon
jeffh@ludwig.cc.uoregon.edu

Date: 14 Sep 93 15:46:55 GMT
From: ogicse!henson!netnews.nwnet.net!news.uoregon.edu!
systems%ns.uoregon.edu@network.ucsd.edu
Subject: Quadrifilar Heliz
To: ham-space@ucsd.edu

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I too would be interested in plans for this antenna...got an ad in the mail for one and they wanted ~\$300.

--
Jeff Hite KF7SZ
Computing Center
U of Oregon
jeffh@ludwig.cc.uoregon.edu

Date: 14 Sep 93 15:47:10 GMT
From: ogicse!henson!netnews.nwnet.net!news.uoregon.edu!
systems%ns.uoregon.edu@network.ucsd.edu
Subject: Quadrifilar Heliz
To: ham-space@ucsd.edu

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Jeff Hite KF7SZ
Computing Center
U of Oregon
jeffh@ludwig.cc.uoregon.edu

Date: 14 Sep 1993 18:28:25 GMT

From: sdd.hp.com!vixen.cso.uiuc.edu!howland.reston.ans.net!wupost!trinews.sbc.com!
rvt@network.ucsd.edu
Subject: Quadrifilar Heliz
To: ham-space@ucsd.edu

In article <274p6g\$t56@pith.uoregon.edu> jeffh@ludwig.cc.uoregon.edu (Jeff Hite) writes:

>In article <1993Sep13.022441.4648@news.eng.convex.com> psmith@convex.com
>(Presley Smith) writes:
>> Does anyone know where I could find plans/dimensions, etc. for building
>> a Qaudrifilar Helix for 145 MHz and 435 MHz? If you know of a book

The ARRL Satellite Experimenter's Handbook, 1980, has constuction information for quadrifilar helix antennas for 146 and 435 MHz.
See pages 8-15 and 8-16.

--

Roger V. Thompson, P.E. | ARS AD5T
Southwestern Bell Technology Resources, Inc. | 314-529-7847 (Office)
550 Maryville Centre Dr. | 314-529-7674 (Fax)
St. Louis, MO 63141 | rvt@calvin.sbc.com

Date: Tue, 14 Sep 1993 12:32:05 GMT

From: asirt8.aa.wpafb.af.mil!iris.mbvlab.wpafb.af.mil!blackbird.afit.af.mil!
tkelso@uunet.uu.net
Subject: Two-Line Orbital Element Set: Space Shuttle
To: ham-space@ucsd.edu

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial BBS, (513) 427-0674, and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below. The Celestial BBS may be accessed 24 hours/day at 300, 1200, 2400, 4800, or 9600 bps using 8 data bits, 1 stop bit, no parity.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

STS 51

1	22795U	93 58	A	93256.41666666	.00036897	00000-0	89862-4	0	43
2	22795	28.4621	352.7380	0026491	330.5874	12.7533	15.94075766		146

Date: Tue, 14 Sep 1993 23:20:21 GMT

From: iris.mbvlab.wpafb.af.mil!blackbird.afit.af.mil!tkelso@uunet.uu.net
Subject: Two-Line Orbital Element Set: Space Shuttle
To: ham-space@ucsd.edu

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STS 51

1	22795U	93 58	A	93257.24999999	.00038189	00000-0	90490-4	0	71
2	22795	28.4628	346.4784	0026379	339.7232	116.8841	15.94583426		285
1993 058B									
1	22796U	93 58	B	93256.91478473	-.00023693	00000-0	-29821-1	0	33
2	22796	15.4628	357.0990	7477878	359.4164	359.9364	2.00283271		34
1993 058D									
1	22797U	93 58	D	93256.91467598	-.00000220	00000-0	99999-4	0	14
2	22797	15.4921	356.7068	7472328	359.5954	2.6435	2.01098776		32
1993 058C									
1	22798U	93 58	C	93255.84373842	.00021892	00000-0	79894-4	0	13
2	22798	28.4606	357.0089	0022166	244.8563	57.6075	15.86464053		54

--

Dr TS Kelso
tkelso@afit.af.mil

Assistant Professor of Space Operations
Air Force Institute of Technology

Date: Tue, 14 Sep 1993 20:34:59 GMT
From: swrinde!cs.utexas.edu!math.ohio-state.edu!cis.ohio-state.edu!
udecc.engr.udayton.edu!blackbird.afit.af.mil!tkelso@network.ucsd.edu
Subject: Two-Line Orbital Element Set: Space Shuttle
To: ham-space@ucsd.edu

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STS 51

1 22795U 93 58 A 93257.24999999 .00038189 00000-0 90490-4 0 71	
2 22795 28.4628 346.4784 0026379 339.7232 116.8841 15.94583426 285	

--
Dr TS Kelso Assistant Professor of Space Operations
tkelso@afit.af.mil Air Force Institute of Technology

Date: 14 Sep 1993 16:51:21 GMT
From: sdd.hp.com!hpscit.sc.hp.com!news.dtc.hp.com!col.hp.com!dfk@network.ucsd.edu
To: ham-space@ucsd.edu

References <1993Sep13.184859.23408@microsoft.com>, <273bp1\$6tp@TAMUTS.TAMU.EDU>, <1993Sep14.140755.21801@genroco.com>~/
Subject : Re: Can I use MIR as a digipeater?

Don Woelz (don@genroco.com) wrote:
: In article <273bp1\$6tp@TAMUTS.TAMU.EDU> gerry@cs.tamu.edu (Gerald J Creager)
writes:
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: >David Arnold <davidar@microsoft.com> wrote:
: >>I haven't had any luck trying. Also, any hints on how to connect to MIR
: >>would be appreciated.
: >

```
: >Basically, it's
: >been my experience that you need to get 'em when they just hit the horizon, or
: >be persistent throughout the pass.
: >
: This is absolutely the wrong way to go about this.
```

The correct method is nicely explained in the Aug 1993 issue of QST on pages 65 and 66. Continuous connect attempts when MIR is busy just brings all data flow to a halt. The article shows how to configure the TNC to look at the control information in a packet, and determine the best time to attempt a connect.

Dave N0UVR
dfk@col.hp.com

End of Ham-Space Digest V93 #30
